

2023/2024

RADON PROFESSIONAL'S FAN GUIDE



FAN SELECTION SPECIFICATIONS AND GUIDELINES

With Fan Replacement Guide

This handy 4-page guide is intended to make it easier for you to have RadonAway® fan specifications and our fan replacement chart at your fingertips where you need them, when you need them.

As always, we are committed to providing you with not only the highest quality radon mitigation products but also information to help you provide expert, effective professional radon services.

To request copies, contact your RadonAway Account Manager.





RP Pro Series

Use RP fans for quiet operation, energy efficiency and high air flow in porous sub-slab or sub-membrane materials consisting of about 4 inches of clean, size 4-6 gravel.



XP/XR Pro Series

Use XP/XR fans for compact size, lower pressure and average flow in very porous sub-slab/membrane materials consisting of 4 inches of clean, size 4-6 gravel.



LV175

The LV175 Low Voltage Radon Fan includes a power pack and cord for connecting to up to 120v AC power. No additional electrical work is required.



GX Series

The GX Series fans will get the job done when conditions call for power, reliability and quiet operation in moderate to tight sub-slab/membrane conditions.



GPc Pro Series

Use GPc fans for versatility and a broad performance range in moderate to tight sub-slab/sub-membrane conditions. Ideal choice when multiple suction points are necessary.



SF180

Use the SF180 for its low-profile design and moderate to good air flow in porous sub-slab or sub-membrane conditions ranging from about 4 inches of clean, size 4-6 gravel, to very loose soil.



EC6

Use the EC6 variable-speed fan for applications where high suction and high flow are required. Ideal for high radon levels, poor sub-slab communication, multiple suction points and/or large sub slab footprint..



HS Series

Use HS fans in sand, clay or tight soil conditions when you need higher suction than an inline fan can provide.

MODEL	P/N	FAN DUCT DIAMETER	RRNC 2.0 RADON FAN TYPE	WATTS	RECOM. MAX OP. PRESSURE "WC* Alt. >1,000ft. see NOTE	MAX. PRESSURE "WC	TYPICAL CFM vs. STATIC PRESSURE WC															FAN WEIGHT (lbs)	SHIPPING WEIGHT (lbs)
							0"	.2"	.5"	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"	4.5"	5.0"					
RP140†	28460	4"	RF1	17-21	0.70	0.78	138	110*	66*	-	-	-	-	-	-	-	-	-	-	-	-	4.5	6
RP145	28461	4"	RF1, RF2	34-66	1.7	2.1	169	150*	124*	81*	42	4	-	-	-	-	-	-	-	-	-	5.5	7
RP260	28462	6"	-	47-65	1.3	1.4	251	210*	157	70	-	-	-	-	-	-	-	-	-	-	-	5.5	8
RP265	28463	6"	-	96-136	2.3	2.4	375	340*	282*	204*	140	70	-	-	-	-	-	-	-	-	-	6.5	9
RP380	28464	8"	-	90-145	2.0	2.2	541	510*	461*	347*	235	107	-	-	-	-	-	-	-	-	-	11.5	12
XP151	28469	4"	RF1, RF2	53-70	1.4	1.5	167	151	127	77	-	-	-	-	-	-	-	-	-	-	-	4.9	6
XP201	28470	4"	RF1	38-74	1.6	1.7	126	115	98	60	26	-	-	-	-	-	-	-	-	-	-	5	6
XR261	23019-1	6"	-	67-117	1.6	1.7	217	190	149	87	27	-	-	-	-	-	-	-	-	-	-	5.7	8
LV175	28537	4"	RF1, RF2	30-75	1.9	2.1	216	200	176	135	90	45	-	-	-	-	-	-	-	-	-	5.5	7.5
GX3	28584	3"	-	60-135	3.3	3.5	-	-	-	96	86	72	57	40	-	-	-	-	-	-	-	7.6	10
GX4	28585	3"	-	74-158	4.8	5.3	-	-	-	-	-	84	74	63	53	41	-	-	-	-	-	8.1	10
GX5A	28536	4"	-	80-180	5.0	5.1	178	173	-	153	-	123	-	96	-	53	-	6	-	-	-	8.9	12
GP301c	28466	3"	-	56-100	2.3	2.5	-	-	-	64	54	41	4	-	-	-	-	-	-	-	-	9.8	12
GP501c	28468	3"	-	68-146	3.8	4.1	-	-	-	-	-	66	58	50	27	-	-	-	-	-	-	10	12
SF180	28317	3" or 4"	-	53-71	1.7	2.1	149	139	127	96	61	-	-	-	-	-	-	-	-	-	-	12.8	15
GP500	23003-1	3"	-	85-153	3.8	4.0	-	-	-	-	-	51	45	35	18	-	-	-	-	-	-	18	20
EC6	28625	6"	-	140-175	4.25	4.4	514	490*	451	381	330	271	211	152	101	49	-	-	-	-	-	6.5	8.25

*Denotes HVI certified values. † Denotes Energy Star® Rated.

MODEL	P/N	FAN DUCT DIAMETER	SPEED SETTING	WATTS	RECOM. MAX OP. PRESSURE "WC	MAX. PRESSURE "WC	TYPICAL CFM VS STATIC SUCTION WC										FAN WEIGHT (lbs)	SHIPPING WEIGHT (lbs)
							2.5"	5.0"	7.5"	10.0"	12.5"	15.0"	20.0"	25.0"				
HS2750	28595	3" inlet 2" outlet	Low	112-123	5"	7.8"	33	24	-	-	-	-	-	-	-	18	21.6	
			Med	199-245	10"	13.5"	47	42	34	25	-	-	-	-				
			High	266-337	15"	17.6"	-	-	47	43	33	23	-	-				
			Max	361-463	20"	22.6"	-	-	-	-	48	43	24	-				
MODEL	P/N	FAN DUCT DIAMETER	SPEED SETTING	WATTS	RECOM. MAX OP. PRESSURE "WC	MAX. PRESSURE "WC	5.0"	10.0"	20.0"	25.0"	30.0"	35.0"	40.0"	50.0"	FAN WEIGHT (lbs)	SHIPPING WEIGHT (lbs)		
HS5500	28596	3" inlet 2" outlet	Low	243-281	20"	24.5"	44	39	22	-	-	-	-	-	19.25	22.9		
			Med	372-477	30"	34.7"	-	53	41	36	22	-	-	-				
			High	527-625	40"	44.6"	-	-	-	45	39	31	22	-				
			Max	591-632	50"	52.6"	-	-	-	-	-	34	29	17				

RRNC 2.0 ANSI/AARST Standard

Reducing Radon in New Construction of 1 & 2 Family Dwellings and Townhouses

This chart displays the designated radon fan types recommended in the new standard.

*Radon Fan Types RF1 & RF2 minimum flow and pressure ratings are manufacturer specifications.

PIPE SIZE Nominal (I.D.)	TOTAL FOUNDATION AREA		
	< 1600 sq. feet < 149 sq. meters	1600 to 2500 sq. feet 149 to 232 sq. meters	> 2500 sq. feet > 232 sq. meters
(3") [7.6 cm]	Use Radon Fan Type: RF1 RF1 Minimum rating:* 50 cfm @ 0.5" WC [85m³/hr @ 125 Pa]	Use Radon Fan Type: RF2 RF2 Minimum rating:* 75 cfm @ 1.0" WC [127m³/hr @ 250 Pa]	Radon fan to be sized by a certified/licensed radon mitigator.
(4") [10 cm]	Use Radon Fan Type: RF1 RF1 Minimum rating:* 50 cfm @ 0.5" WC [85m³/hr @ 125 Pa]	Use Radon Fan Type: RF1 RF1 Minimum rating:* 50 cfm @ 0.5" WC [85m³/hr @ 125 Pa]	Radon fan to be sized by a certified/licensed radon mitigator.

NOTE: This chart is based on airflow through the ducting of the fan. Every time you reduce the duct size, there is a 20% degradation of airflow. Airflow drops 4% every 1000 feet alt. You can calculate adjusted recommended maximum operating pressure based on the following formula:

EXAMPLE:
GP501 Fan Operating in Denver, CO at Elevation of 5280 ft

$$\left(\text{Recommended Fan Operating Pressure} \right) - \left(\text{Recommended Fan Operating Pressure} \times \frac{\text{Altitude}}{1,000 \text{ ft}} \times 4\% \right) = \text{Actual Maximum Fan Operating Pressure (Adjusted for altitude)}$$

$$\left(3.8" \text{ Recommended WC} \right) - \left(3.8" \times \frac{5,280 \text{ ft}}{1,000 \text{ ft}} \times 4\% \right) = 3.0" \text{ Actual WC}$$

Using Denver, CO as an example, RP145 actual WC reduces to 1.3, and RP265 reduces to 1.7 at 5,280 ft.

RRNC

RADONAWAY FANS SUITABLE AS DESIGNATED BY RRNC 2.0 STANDARD

MODEL	FAN DUCT DIAM.	WATTS	RECOM. MAX. OP. PRESSURE "WC	TYPICAL CFM vs. STATIC PRESSURE WC					RRNC 2.0 Radon Fan Type
				0"	0.2"	0.5"	1.0"	1.5"	
RP140†	4"	14-19	0.6	152	120*	64*	-	-	RF1
RP145	4"	34-66	1.7	169	150*	124*	81*	42	RF1, RF2
XP151	4"	53-70	1.4	167	151	127	77	-	RF1, RF2
XP201	4"	38-74	1.6	126	115	98	60	26	RF1
LV175	4"	30-75	1.9	216	200	176	135	90	RF1, RF2

*Denotes HVI certified values. † Denotes Energy Star® Rated.

RadonAway® Replacement Fans		
	ORIGINALLY INSTALLED FAN	RadonAway® REPLACEMENT FAN
Fantech	Rn4	GX4, GX5A, GP501c, EC6
	R100, F100, FR100, HP2133, Rn1	RP140 or LV175
	R150, F150, FR150, Rn3	XR261 or RP260
	R160, F160, FR160, Rn2X	RP260 or RP265
	R175, F175, FR175	RP265
	HP190, HP2190, Rn2, Rn2EC	RP145 or LV175
	HP190SL, Rn2SL	SF180
	HP220	RP265
AMG/FESTA	Maverick Low Voltage	RP145, XP151, XP201, or LV175
	Hawk Low Voltage	RP260 or XR261
	Prowler Low Voltage	GX3, GP301c
	Legend Low Voltage	RP265
	Eagle	GX3, GX4, GP301c
	Eagle Extreme	GX4, GX5A, EC6
	Legend Extreme	EC6
	Goliath	RP260, GX4, GX5A, EC6
	Force	RP260, GX4, GX5A, EC6
Kanalfakt/ FanAmerica	T1 Turbo 5 (Fiberglass)	XP201*, XP151*, or LV175
	T2 Turbo 6 (Fiberglass)	XR261 or RP260
	K4 (Metal Kanalfakt)	RP140* or LV175
	K4XL (Metal Kanalfakt)	XP201*, XP151*, or LV175
	K6 (Metal Kanalfakt)	XR261 or RP260
Rosenberg	R100	RP140* or LV175
	R150	XR261 or RP260

*Slightly different duct diameter requires different flexible couplings. Depends on site needs: airflow vs. static pressure.